U.S. Patent App. Ser. No. 10/705,523

• Attorney Docket No. 14325/15 (formerly 10191/2479B)

RCE Reply to Final Office Action of May 2, 2008

(in lieu of Appeal Brief)

## **REMARKS**

Claims 16 to 18, 20, and 24 to 26 are now pending in the above-referenced application. Reconsideration is respectfully requested based on the following remarks.

With respect to the Office Action Summary, it seems to indicate that the Drawings remain objected to, but the Detailed Action does not indicate in any way why this is so. The Drawings were previously amended in the prior response, and it is believed that this issue may have been resolved but that the Examiner may have forgotten to indicate that the Drawings are now accepted. In any event, the drawings objection is traversed for the reasons stated in the prior response, and it is requested that the Examiner enter and approve the previously filed Replacement Figure 5, and that the Examiner indicate that the Drawings are accepted in the next Office communication.

Claim 16 was rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,212,831 to Chuang et al. ("Chuang") in view of U.S. Patent No. 6,574,456 to Hamabe ("Hamabe").

While the rejections may not be agreed with for the reasons explained below, to facilitate matters, claim 16 has been rewritten to provide that the channel measurement on all possible transmission channels is performed prior to the assigning of the uplink channel and the downlink channel, and wherein the mobile station performs the channel measurement for channel transmissions in the downlink direction and the base station performs the channel measurement for channel transmissions in the uplink direction with independent assignment of the uplink channel and the downlink channel.

It is believed and respectfully submitted that the applied references, whether taken alone or in combination do not disclose the features in which the channel measurement on all possible transmission channels is performed prior to the assigning of the uplink channel and the downlink channel, and wherein the mobile station performs the channel measurement for channel transmissions in the downlink direction and the base station performs the channel measurement for channel transmissions in the uplink direction with independent assignment of the uplink channel and the downlink channel, as provided for in the context of the claimed subject matter.

U.S. Patent App. Ser. No. 10/705,523
Attorney Docket No. 14325/15 (formerly 10191/2479B)
RCE Reply to Final Office Action of May 2, 2008 (in lieu of Appeal Brief)

Accordingly, claim 16, as presented, and its dependent claims are allowable for these reasons alone.

Still further, and as explained in the prior response, the system of Chuang is one in which the new port determines its transmitting frequency by scanning the available downlink channels and selects that with the minimum interference from other surrounding ports. The receive frequency is paired to the transmit frequency such that the selection of the transmit frequency of the downlink channel is also a selection of the receive frequency of the uplink channel.

As to Hamabe, it refers to a system in which base stations transmit perch channels at predetermined frequencies. A mobile station measures the power of the perch channels which it detects and establishes a channel with the base station having a maximum median received power (col. 9, lines 31-34). In Fig. 2, the communication channel 41 is indicated to be separate from the perch channel 31, with both channels being transmitted from the base station 11 to the mobile station 21. Further, as in Fig. 3, for each base station, three frequency bands are used for transmissions from each base station (forward channel) and three frequency bands for transmissions to each base station (reverse channel). The base station measures a signal to interference ratio (SIR) of transmissions on the uplink channel for transmission power control (col. 9, lines 41-58).

In both the arrangements of Chuang and Hamabe, certain downlink channels are monitored but the only monitoring of the uplink channels is the measurement of the SIR value of transmissions in the arrangement of Hamabe. Accordingly, Chuang and Hamabe (whether taken alone or combined) do not disclose nor suggest the feature of performing of a channel measurement on all possible transmission channels – that is, both the uplink and downlink channels. In Chuang, only the downlink channels are measured and in Hamabe, only certain of the downlink channels are measured by the mobile stations, the perch channels, and only the SIR values are determined for certain uplink channels. The SIR value does not correspond to the channel quality measurement of the claim since this SIR value measurement is performed only after the connection has been established.

Furthermore, the arrangement of Hamabe is not one in which the operation of the base stations is uncoordinated as provided for in the context of claim 16. The text at col. 8, lines 11-13, specifically provides that the networks A and B are "connected each other". Further, the text at col. 9, line 65 to col. 10, line 7, describes the exchange of frequency information between the cellular systems. Since the system of Hamabe requires the coordinated exchange of information

U.S. Patent App. Ser. No. 10/705,523
 Attorney Docket No. 14325/15 (formerly 10191/2479B)
 RCE Reply to Final Office Action of May 2, 2008
 (in lieu of Appeal Brief)

between base stations for the allocation of "adjacent" or "non-adjacent" frequencies, it is respectfully submitted that if Hamabe were to be combined with Chuang, any resulting system would be one in which the base stations would act in a coordinated manner to establish a connection.

Still further, in claim 16, uplink and downlink channels are assigned following a measurement of channel quality of each available channel. Thereafter, all the available channels are repeatedly re-measured to obtain a measure of channel quality such that if a change of channel is subsequently necessary, this can be performed using the previously obtained information. In contrast, the Chuang reference refers to an arrangement in which only the base unit or "port" scans the frequency spectrum to measure the power at the downlink frequencies (col. 12, lines 23-27). Following this measurement, the transmit frequency of the port is determined and the uplink frequency "associated with this downlink frequency" is set (col. 12, lines 30-34). Accordingly, there is no independent assignment of the uplink and downlink channel. The scanning arrangement of Chuang does not establish a connection. As indicated in the first paragraph of col. 12, it is an off-line process and is explicitly distinguished over the real-time radio access.

Accordingly, the Chuang reference and Hamabe references, whether taken alone or combined, do not disclose or suggest every feature of claim 16, as presented, so that this claim is allowable, as are its respective dependent claims.

As further regards claim 16, it is noted that in the described embodiment, the mobile station performs the channel measurement for transmissions in the downlink direction and the base station performs the channel measurement for channels in the uplink direction, as described at page 9, lines 30-35. This is also plainly distinguishable over the combination in that the mobile station in Hamabe performs channel measurements on the perch channels which are not available for use as transmission channels. Further, since the base station transmits in three frequency bands in Hamabe, a perch station measurement performed for one frequency band would provide no information regarding channels in the other two frequency bands. The base stations in Chuang perform channel measurements on the downlink frequencies and not the uplink frequencies, monitoring the other neighboring ports.

Claims 17, 18 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chuang and Hamabe in view of "Chuang2000", United States Patent No. 6,052,594..

U.S. Patent App. Ser. No. 10/705,523
 Attorney Docket No. 14325/15 (formerly 10191/2479B)
 RCE Reply to Final Office Action of May 2, 2008

 (in lieu of Appeal Brief)

Claims 17, 18 and 26 depend from claim 16, and are therefore allowable for essentially the same reasons, since the further reference does not cure the critical deficiencies of the primary reference, nor is it asserted to do so.

Claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chuang and Hamabe in view of United States Patent No. 6,442,152 to H'mimy. Claims 24 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chuang and Hamabe in view of U.S. Patent No. 5,093,924 to Toshiyuki et al. ("Wejke").

Claims 20, 24 and 25 depends from claim 16, as presented, and are therefore allowable for essentially the same reasons, since the further references do not cure the critical deficiencies of the primary reference, nor are they asserted to do so.

As further regards claim 20, while the Office Actions to date conclusorily assert that H'mimy discloses channel measurement during an existing connection, this channel measurement is only of the existing connection, the H'mimy reference specifically indicates that it is not necessary for suitable new channels to be identified in advance of a change in channel due to interference (see col. 5, line 66 to col. 6, line 10) because the new channel can be chosen based on the old channel. To perform the method described, an initial measurement is made of the up-link channels which are then segregated into interference bands (col. 6, lines 20-24). The mobile stations do not perform a channel measurement of all possible channels and no repeated remeasurement is performed after connection establishment. Accordingly, claim 20 is allowable for this further reason.

Accordingly, claims 16 to 18, 20, and 24 to 26 are allowable.

U.S. Patent App. Ser. No. 10/705,523
Attorney Docket No. 14325/15 (formerly 10191/2479B)
RCE Reply to Final Office Action of May 2, 2008 (in lieu of Appeal Brief)

## **CONCLUSION**

In view of the above, it is respectfully submitted that all of the presently pending claims 16 to 18, 20, and 24 to 26 are allowable. It is therefore respectfully requested that the objections and rejections be withdrawn, since they have been obviated. Since all issues raised have been addressed, an early and favorable action on the merits is respectfully requested.

Dated: 12/33/8

Respectfully Submitted,

gerard A. Messina

(Reg. No. 35,952

KENYON & KENYON LLP

One Broadway

New York, NY 10004

(212) 425-7200

**CUSTOMER NO. 26646** 

1652508